

## **SCREEN AND SHELF UNIT**

### **BACKGROUND**

#### Field of the Invention

- 5 The invention relates in general to utility shelving units and more particularly to a combination shelving unit and screen structure that is especially useful in obscuring from view unsightly household features.

#### Description of the Related Art

- 10 Many buildings, particularly those with older heating systems, cooling systems, or with septic tanks, have areas that contain exposed pipes, electrical or duct work, lift stations, sump pumps, and the like. Often, these areas are covered or enclosed out of aesthetic considerations. Thus, several different types of coverings have been used and developed over the years to hide (or at least distract attention from) features or devices that many consider to be "eyesores."

- 15 The types of coverings range from strategically positioning a painting or tapestry, to a simple bucket-like cover, to building a permanent structure, such as a cabinet or closet, in order to partially or completely obscure an unattractive feature from sight. For example, a cover for a sump and sump pump found in U.S. Patent No. 4,080,984 by Klein features a walled, hollow  
20 housing having a peripherally disposed, downwardly depending flange and a plurality of holes. While Klein's cover may address safety concerns and keep the sump and sump pump out of sight, it is specifically adapted for use with these structures and is not suitable for covering ductwork, pipes that run up walls, etc.

A second example of the related art is disclosed in U.S. Patent No. 3,399,730 issued to Humphrey. Humphrey's sump pump cover is a flexible dome-like structure with a radial slot that allows a pipe to exhaust fluid from within the sump by passing through the cover. While this cover may be suitable for its intended purpose, no motivation or suggestion is provided by

5      Humphrey for screening the sump pump (or other unsightly items) from sight.

Moreover, none of the coverings known to exist combine a screen (to at least partially obscure aesthetically displeasing items from sight) with one or more shelves for augmenting the utility of a screened area by adding a storage and display platform for objects.

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Therefore, in view of the above, it would be desirable to have a screening structure that features one or more shelves for simultaneously screening an area from view and providing storage and display capabilities.

## SUMMARY OF THE INVENTION

The invention relates in general to a screening member that features one or more shelves. More particularly, the invention features a screening member that includes one or more adjustable and  
5 removable shelves that are horizontally supported by the screening member such that the screening member and shelf(ves) are configured to enclose an area. Thus, the invention also relates to a method of enclosing an area that includes the steps of providing at least one screening member, providing at least one removable shelf, and horizontally supporting each shelf with at least one screening member such that the screening member and shelf (or shelves) are  
10 configured to enclose the area.

In one preferred embodiment, the shelf or shelves of the invention require only friction (and no fasteners, dowels, brackets or other structures) to be held in place. Thus, the shelves are easily collapsible (removable) for access to the area enclosed by the screen and shelf structure.  
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In another embodiment of the invention, the screening member is integrally formed in a planar configuration and provides a portable sight barrier.

In another embodiment of the invention, the screening member includes a “permanent” wall  
20 structure (for example, an existing structure made of dry wall, masonry, etc.).

Thus, it is a primary objective of the invention to provide a screen and shelf unit that encloses an area and at least partially obscures that area from view.

Further, an object of the invention is to provide a screen and shelf unit that provides storage and display utility in addition to a sight barrier.

Another object of the invention is to provide a method of enclosing an area that can be practiced  
5 with portable screens, existing and newly added walls, closets, doorways and other permanent structures, and combinations thereof.

Still another object of the invention is to provide a screen and shelf unit that is portable and collapsible.

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Yet another object of the invention is to provide a screen and shelf unit that is simple and inexpensive to mass produce, as well as to produce according to a customer's specifications.

In accordance with these and other objects there is provided a new and improved screen and  
15 shelf unit and method of enclosing an area therewith.

Various other purposes and advantages of the invention will become clear from its description in the specification that follows. Therefore, to the accomplishment of the objectives described above, this invention includes the features hereinafter fully described in the detailed description  
20 of the preferred embodiments, and particularly pointed out in the claims. However, such description discloses only some of the various ways in which the invention may be practiced.

## **BRIEF DESCRIPTION OF THE DRAWINGS**

Fig. 1 is a schematic, top view of the invention.

5 Fig. 2 is a schematic, front view of the embodiment shown in Fig. 1 with multiple shelves in place.

Fig. 3a is a schematic, top view of a second embodiment of the invention utilizing portable screening members.

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Fig. 3b is a schematic, side view of a portion of the screening member that is viewed as indicated by arrow A.

Fig. 4 is a schematic, top view of a third embodiment of the invention utilizing a portable screening  
15 member and an existing wall.

## DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

The invention relates to a combination screen and shelf unit that is configured to enclose an area and that features at least one removable shelf that is in contact with, and supported horizontally by, a screening structure. Each shelf can be held in place by a bracket or similar structure or, preferably, frictionally engaged between two screening members, one or both of which can be an existing wall or other permanent structure. As items of a suitable weight and size are placed on each shelf, storage or display capabilities are created in addition to a screening effect.

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10 Turning to the figures, a first embodiment of the screen and shelf unit enclosing a closet area 2 is shown in top view (Fig. 1) and front elevational view (Fig. 2). The closet area 2 is bordered on three sides by screening members 4a, 4b, and 4c. The screening members 4a-4c may be constructed of any suitable material, including, for example, finished or unfinished drywall, wood, brick and the like. Disposed within closet area 2 are four support members 6a, 6b, 6c, and 15 6d. The support members 6a-6d may simply be exposed 2x4's on an existing unfinished wall or may be added to screening members 4a and 4c.

Side member 8a and 8b abut an optional back member 12 that is disposed between side members 8a and 8b and support members 6b and 6c. The use of back member 12 completely screens the 20 closet area 2 from view. Shelf 14 is adapted to frictionally engage back member 12 and support members 6a and 6d such that the shelf is held in a horizontal position. Alternatively, support members 6a-6d and shelf 14 can be adapted to engage each other directly so that shelf 14 is horizontally supported by frictional engagement with the support members or by added brackets or dowels (not shown).

As seen in the front, elevational view of Fig. 2, more than one shelf 14 can be supported by screening members 4a and 4c through the placement of support members 6a and 6d and side members 8a and 8b. The shelves 14 can then provide platforms for storage and display of various items (shown in phantom line).

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Figs. 3a and 3b depict a second embodiment of the invention that features a portable screen and shelf unit. An enclosed area 18 containing a pipe 19 is bordered by a V-shaped screening member 20 and at least one shelf 22. Each shelf 22 is supported horizontally by the screening member 20 through a joint 24 located near the distal ends 26. As seen in Fig. 3b, the joint in this 10 case includes a slot 28 disposed in each end 26 of screening member 20, with shelf 22 held horizontally in place through engagement with each slot.

By making each shelf 22 removable, access is gained to the area 18 so that pipe 19 can be serviced. Moreover, constructing the screening member 20 such that it is portable provides 15 added flexibility to the user. Non-limiting examples of screening member materials that would be portable yet support the weight of one or more shelves include fabric framed by aluminum, PVC, polystyrene, or the like; planar wood panels, a thin steel sheet bent into a V-shape, etc.

Because the invention can utilize existing screening members (e.g., walls, closets) and/or newly 20 constructed screening members, the invention can be adapted to provide a screen and shelf unit that encloses practically any area. Turning to Fig. 4, a sump pump is located in an area 30 that is enclosed by two existing walls 32a and 32b, one added screening member 34, and one or more shelves 36 supported horizontally by wall 32b and screening member 34. Thus, an attractive shelf and screen unit is created to conform to the requirements of the user.

A method of enclosing an area is also taught. The method generally includes providing at least one screening member, providing at least one removable shelf, and horizontally supporting each removable shelf with a screening member such that the screening member and shelf or shelves are configured to enclose the area. Thus, for the embodiment shown in Fig. 4, one practices the  
5 method of the invention by enclosing the area around pump through providing the screening member 34 and supporting horizontally at least one shelf 36 with the provided screening member 34 and the existing wall 32b.

Various changes in the details and components that have been described may be made by those  
10 skilled in the art within the principles and scope of the invention herein described in the specification and defined in the appended claims. For example, the screening member of the invention may be formed (fabricated, cast, molded, etc.) with any suitable material (such as, for example, wood or fabric framed by metal) that is rigid enough to provide a sight barrier while also withstanding the weight of one or more shelves without tearing or breaking. Therefore,  
15 while the present invention has been shown and described herein in what is believed to be the most practical and preferred embodiments, it is recognized that departures can be made therefrom within the scope of the invention, which is not to be limited to the details disclosed herein but is to be accorded the full scope of the claims so as to embrace any and all equivalent processes and products.